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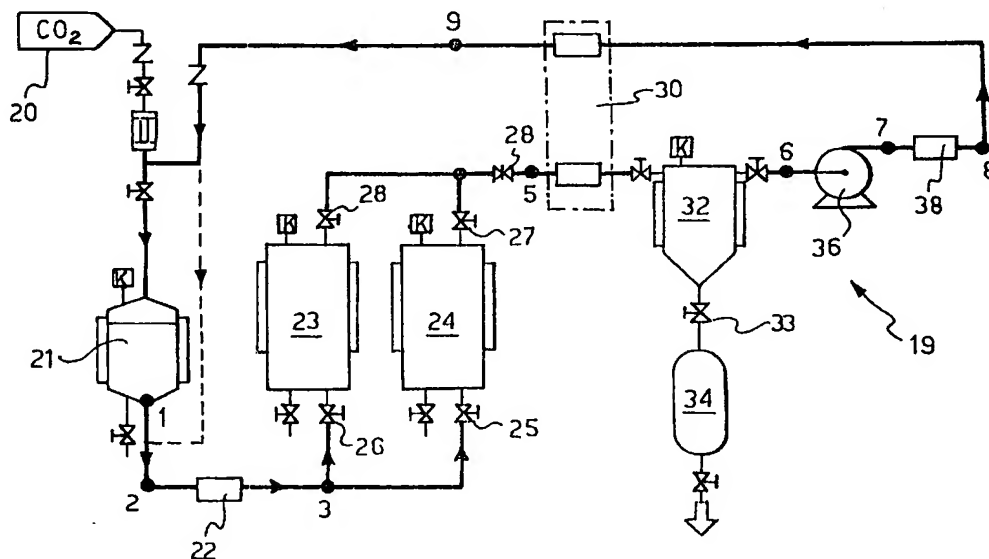
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(54) Title: METHOD AND APPARATUS FOR REMOVING SUBSTANCES FROM SOLID MATRIX WITH ENERGY SAVING



(57) Abstract: A method and apparatus for washing solid matrices such as swarf from machining operations, bottles or other containers, contaminated with lubricating oils or similar substances, are described. The method is implemented with liquid CO₂ which dissolves the organic substances and is then separated therefrom by evaporation; the evaporated CO₂ is then compressed and condensed in order to recommence the cycle. An advantage of the method and apparatus is that some of the heat supplied to the CO₂ for its evaporation and some of that removed for its condensation are obtained by providing for an exchange of heat between the evaporator and the condenser of the system.